Saving Our CLASSIC Heath 8-Bit Machines!

The SEBHOUJOHENAS

The Society of Eight Bit Heath Computerists' Official Monthly Newsletter

Volume VI, Number 6

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See Page 11 for Subscription information & Green Blank

HAPPY NEW YEAR

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See pp 8 & 9 for Tightwad Gazette Notes

Volume VI, Number 6, Page 2

Reader's

Dear Lenny,

No, I haven't fallen by the wayside, or into a quagmire of "stuff" for my upcoming book, but have used every free minute from the shop to work on this "stuff" for the book. Tracking down outside sources of B&W photos has been like a search for an ice cube on a remote South Pacific island. Besides I have so many permissions to be obtained from publishers of my previous articles. And we have the gragantuan job of pulling out our navigational charts and charting our course over the five and a half years we sailed our wooden ketch around the world. Today is one of those mapping days.

I'm trying to wean myself away from my once trusted 'B9er as it sits forlornly by the side of this Panasonic. Even if I did get it repaired today, another tomorrow will come along and I'm again faced with the problem of trying to bring it back to life. (How many lives D0 these wonderful old boxes have?!)

So, I'm just touching base with you. I have not "thrown out" my '89, exterior disc drive, or MX-80 printer. Time just does not allow me to pursue the repairs, and certainly I'm quite short on patience to support it. I just wish there were some one here locally who could keep it all in repairs when needed --and not at the prices some repairmen deem their "going hourly rate", even if they could repair it (which many have said they couldn't).

I know you still have my original BASIC-80 discs and I want to thank you for all the effort you have given to get me operational again on the '89er. Needless to say, I do miss the capabilities of that old grey box. Magic Wand is a great word-processing software [item] and I miss the word count that the Panasonic lacks, among many other features which produced my book--"CIRCUMNAVIGATION: Sail the Trade Winds", and two others, plus many articles. . . .

SUE MOESLY, 3760 North Highway 1, Cocoa, FL 32926; phone 407-631-7575

[Sue, baby! I haven't forgotten you or upgrading your CP/M discs to work with double-sided drives, but I have been so very busy with the blasted year-end holidays (and an #itchy# case of shingles) it has been terribly difficult to get any thing done a-tall! But that's all beginning to change now as I just finished packing your discs, ready for UPS to pick up Monday along with my brother's H100. Please forgive me for entangling and upscrewing your obviously busy schedule. When your "ole grey box" is up'n running again, things surely will improve! And do tell us more about your Panasonic whatzit-op sys, et cetera, ad lib. It may be that I have some *FREE* software you can have, if it runs MS-DOS Version 2 or higher. Nevertheless, have a Really Good and Prosperous New Year! -- ed]

Dear Lenny,

It's been quite a while since I [last] corresponded with you. I've been keeping up with the JOURNAL activities, but

MAILBAG

haven't had much time for other than to read a little of evenings. Things have been quite hectic the past few months with my radio business, and moving residences, and purchasing a new home. . . .

I believe I read in the August JOURNAL that subscriber Parks Watson said he'd like to see more HDOS stuff. As a suggestion, you had an article in the now-defunct SEXTANT March-April issue #9, pp33 - 38, a how-2 article on making your own custom forms with Benton Harbor BASIC under HDOS 2.0. It might be time for these programmes to appear again, this time in the JOURNAL. (You did keep a copy of this article on disc, didn't you?!)

It shouldn't be too difficult to get it into the pages of the JOURNAL, possibly with some modification of printer control codes to make the programmes compatible with Epson's LQ printer line. . . .

Keep up the good work, and may you have a healthy, happy, and prosperous 1992.

ALLIE C LINGO, Editor S E, P O Box 118, Dierks, AR 71833-0118

[Hey, Allie! At last count (over a year ago), I had some 999 plus hard-sector discs full of HDOS 2.0 "stuff". Some day, Real Soon Now, I'll get a chance to go through all of them and dig out the original BHBASIC programmes I put in that article. So, you're not the only one who's been busy (see my reply to Sue Moesly's letter, above). As of today, I have the following High Priority Items awaiting my tender administrations: 1) repair my "other" H100's hard drive; 2) replace the repaired D-G Super89 CPU in my "other" H90; 3) rearrange my computer room layout (now that the Canon NP155 copier is finally gone); 4) sort, categorise, and catalogue ALL my floppy discs and put them in ONE easily accessable central After that, I shall have to catch up on a lot of residential maintenence jobs...the list is endless! But your suggestion is very timely because I've been working on something along the lines of "Formz-R-Us"; your idea fits right in. I'll get something out for you to play with, Really Soon Now. (Do you still run HDOS 2.0?) -- ed]

A NOTE TO OUR READERS:

We find that we have been unknowingly printing a "how-2 fix your '89" feature similar to that which Kirk Thompson has in "The Staunch 8/89er"—the latest example is in his issue #26/27.

Because we don't want to step on anyone's toes, we'll drop this feature unless readers Absolutely Demand We Continue It. (We think Kirk's articles are much better than ours and have elaborate parts lists which include both real and Heath parts numbers--ours don't.) Please make your wishes known....

Volume VI, Number 6, Page 3

OSCAR'S CAI LISTINGS

```
Here are the final two sections of Oscar Yohai's Computer-
                                                                       PRINT VON$; SPC(2); VOF$; TAB(S-2); VON$; M$; VOF$; TAB(73);
Aided Educational Programme. Please note that you can obtain
                                                                     VON$; SPC(2); VOF$
the entire set of Oscar's software on disc for U.S.$7. But,
                                                                  49 RETURN
                                                                  50 REM
we have a VERY LIMITED supply of hard-sector discs in stock,
so if you need a hard-sector copy, please send us a formatted
                                                                  51 REM
                                                                                          TURN OFF GRAPHICS
                                                                  52 PRINT GROF$
(blank) disc so we may copy the programmes to it for the same
$7 charge. Please use order blank on page 11....
                                                                  53 REM
                                                                  54 PRINT: INPUT "PRESS RETURN TO CONTINUE "; Z
1 REM MULT.PRO portion of the big educational program
                                                                  55 PRINT CLR$
2 PN$ = "WELCOME TO THE MULTIPLICATION PROGRAM"
                                                                  56 M=5
3 DT$ = "WRITTEN BY OSCAR YOHAI"
                                                                  57 00:0
4 VN$ = "SEPTEMBER 15, 1990"
                                                                  58 W0=0
5 E$=CHR$(27):CLR$=E$+"E":VON$=E$+"p":VOF$=E$+"q"
                                                                  59 DIM R$(5),N1(5),N2(5),C(5)
6 X$=CHR$(105):GRON$=E$+"F":GROF$=E$+"G"
                                                                  60 PRINT VON$; "Please type in your name "; VOF$;: INPUT N$
7 GOSUB 28:REM
                        CLEAR SCREEN
                                                                  61 PRINT: PRINT
B GOSUB 31:REM
                        TURN GRAPHICS ON
                                                                  62 PRINT VON$; "How many digits for our examples <1> <2> ";
                        PRINT TOP & BOTTOM BORDER LINES
9 GOSUB 35:REM
                                                                     VOF$::INPUT S
10 N=6
                                                                  63 PRINT CLRS
11 GOSUB 40: REM
                        PRINT BLANK LINES
                                                                  64 FOR I=1 TO M
12 MS = PNS: REM
                        M$ IS TEXT MATERIAL VARIABLE
                                                                  65 PRINT SPC(2); VON$; I; VOF$; SPC(4)
13 GOSUB 46: REM
                        PRINT FIRST MESSAGE LINE
                                                                  66 NEXT I
14 N = 2
                                                                  67 PRINT: PRINT
15 GOSUB 40
                                                                  6B REM
                                                                           ****** Data Process Subroutine ********
16 M$ = DT$
                                                                  200 REM
17 GOSUB 46: REM
                        PRINT SECOND MESSAGE LINE
                                                                  210 FOR I=1 TO M
18 GOSUB 40
                                                                          FOR J=1 TO M
                                                                  220
19 MS = VNS
                                                                  230
                                                                                  RANDOMIZE PEEK(11)
20 GOSUB 46
                                                                  240
                                                                                  N1(J)=INT(RND*10^S)
21 N= 3
                                                                  250
                                                                                  IF N1(J) <=1 THEN 230
22 GOSUB 40
                                                                  260
                                                                                  N2(J)=INT(RND*10^S)
23 MS=AUS
                                                                  270
                                                                                  IF N2(J) <=1 THEN 230
24 GOSUB 46
                                                                  280
                                                                          NEXT J
25 GOSUB 35
                                                                          FOR J=1 TO M
                                                                  290
                                                                                  PRINT " ";
26 GOSUB 51
                                                                  300
27 INPUT "PRESS <RETURN> TO CONTINUE ";R$:GOTO 53
                                                                  310
                                                                                  FOR K=1 TO M
                       CLEAR SCREEN
28 REM
                                                                  320
                                                                                    IF N1(J)>=10^(S-K) THEN 360
29 PRINT CLRS
                                                                  330
                                                                                    IF (S-K)+N1(J)=0 THEN 360
30 RETURN
                                                                                  PRINT "
                                                                  340
31 REM
                       TURN GRAPHICS ON
                                                                  350
                                                                                  NEXT K
32 PRINT GRON$
                                                                  360
                                                                                    PRINT N1(J); TAB(J*10);
                                                                          NEXT J
33 RETURN
                                                                  370
                                                                          PRINT
34 REM
                                                                  380
35 REM
                                                                          FOR J=1 TO M
                       PRINT TOP AND BOTTOM BORDER LINES
                                                                  390
36 PRINT VON$; SPC(70); VOF$
                                                                                  PRINT "x";
                                                                  400
37 REM
                                                                  410
                                                                                     FOR K=1 TO S
38 RETURN
                                                                  420
                                                                                      IF N2(J)>= 10^(S-K) THEN 460
                                                                  430
39 REM
                                                                                      IF (S-K)+N2(J)=0 THEN 460
                                                                  440 PRINT " ";
40 REM
                       PRINT BLANK LINES WITH OUTSIDE BORDER
                                                                  450
41 FOR I = 1 TO N
                                                                          NEXT K
      PRINT VONS;" "; VOF$; SPC(66); VON$; " "; VOF$
                                                                  460
                                                                                      PRINT N2(J); TAB(J*10);
42
                                                                  470
                                                                          NEXT J
43 NEXT I
44 RETURN
                                                                  480
                                                                          PRINT
                                                                  490
                                                                          FOR J=1 TO M
45 REM
                       PRINT MESSAGE LINE
                                                                  500
46 REM
                                                                                     FOR K=1 TO S+3
                                                                                        PRINT "-";
   T=LEN(M$):S=(80-T)/2:REM ..... CENTERS TEXT ON SCREEN
                                                                  510
```

Volume VI, Number 6, Page 4

MORE of OSCAR'S LISTING

```
520
                NEXT K
                                                                  1000 PRINT CLR$
530
                PRINT TAB(J*10)
                                                                  1010 PRINT: PRINT: PRINT
540
        NEXT J
                                                                  1020 PRINT TAB(10); VON$;
550
        FOR J=1 TO M
                                                                      " 1> RUN MULTIPLICATION PROGRAM "; VOF$: PRINT
                                                                  1030 PRINT TAB(10); VON$;
560
                PRINT
        NEXT J
                                                                     " 2> RUN ADDITION PROGRAM "; VOF$: PRINT
570
580 PRINT
                                                                  1040 PRINT TAB(10); VON$;
590 FOR I=1 TO M
                                                                     " 3> RUN SUBTRACTION PROGRAM "; VOF$: PRINT
600 PRINT VONS; "ENTER YOUR ANSWER FOR EXAMPLE #"; I; VOFS;
                                                                  1050 PRINT TAB(10); VON$;
                                                                     " 4> RUN DIVISION PROGRAM "; VOF$: PRINT
   :INPUT A(I):PRINT
610
        IF M>5 THEN
                                                                  1060 PRINT TAB(10); VON$;
                                                                       5> RUN MULTIPLICATION TABLES DRILL "; VOF$: PRINT
620 NEXT I
630 PRINT : PRINT : PRINT VONS; "PRESS RETURN TO CONTINUE";
                                                                  1065 PRINT TAB(10); VON$; " 6> QUIT"; VOF$: PRINT
   VOF$;:INPUT Z
                                                                  1070 PRINT TAB(10); VON$;
640 PRINT CLR$
                                                                     " Make selection <1><2><3><4><5><6> "; VOF$;: INPUT D
                  ****** PRINT RESULTS *********
                                                                  1080 ON D GOTO 1090,1100,1110,1120,1130,1140
650 REM
660 PRINT
670 PRINT VONS:
                                                                  1100 RUN "ADD. PRO"
                                                                  1110 RUN "SUB.PRO"
680 PRINT
690 PRINT VONS;
                                                                  1120 RUN "DIV.PRO"
                                            RESULTS"; VOF$
                                                                  1130 RUN "MULTABLE.BAS"
   "EXAMP
           CORRECT ANS
                             YOUR ANS
700 PRINT STRING$(45,"-")
                                                                  1140 PRINT CLR$: PRINT TAB(15); VON$;
                                                                     " Well, ok then! 'BYE! "; VOF$;: SYSTEM
710 FOR J=1 TO 5
720
       C(J)=N1(J)*N2(J)
730
       IF C(J)<>A(J) THEN 770
740
       R$(J)="CORRECT"
                                                                                  MULTABLE.BAS portion of the BIG programme
750
       CO=CO+1
                                                                  2 PN$ = "WELCOME TO THE"
       GOTO 790
                                                                  3 DT$ = "MULTIPLICATON TABLE"
760
        R$(J)="*WRONG*"
                                                                  4 VN$ = "DRILL PROGRAM"
770
                                                                  5 AUS="WRITTEN BY OSCAR YOHAI 8-25-90"
780
       W0=W0+1
790 PRINT USING
                                                                  6 E$ = CHR$(27) : CLR$ = E$+"E" : VON$=E$+"p" : VOF$=E$+"q"
                                                                  7 X$ = CHR$(105) : GRON$=E$+"F" : GROF$=E$+"G"
   "##)
                 ****
                                                   \";J;C(J);
                                                                  B GOSUB 29:REM
   A(J);R$(J)
                                                                                           CLEAR SCREEN
                                                                  9 GOSUB 32:REM
800 NEXT J
                                                                                           TURN GRAPHICS ON
810 PRINT
                                                                  10 GOSUB 36: REM
                                                                                           PRINT TOP AND BOTTOM BORDER LINES
820 PRINT
                                                                  11 N=6
830 NEXT I
                                                                  12 GOSUB 41:REM
                                                                                           PRINT BLANK LINES
                   ****** PROGRAM TERMINATION ********
                                                                                           MS IS TEXT MATERIAL VARIABLE
840 REM
                                                                  13 M$ = PN$:REM
850 PRINT:PRINT:PRINT VON$; "PRESS <RETURN> TO CONTINUE"; VOF$;
                                                                  14 GOSUB 47:REM
                                                                                           PRINT FIRST MESSAGE LINE
                                                                  15 N = 2
860 INPUT Z
                                                                  16 GOSUB 41
870 PRINT CLRS
880 PRINT VONS; "THIS IS YOUR REPORT CARD....."; N$; VOF$;
                                                                  17 MS = DTS
                                                                  18 GOSUB 47:REM
                                                                                           PRINT SECOND MESSAGE LINE
   :PRINT:PRINT
                                                                  19 GOSUB 41
890 PRINT
900 PRINT "*
                 SCORE BOARD
                                *":PRINT
                                                                  20 MS = VNS
                                                                  21 GOSUB 47
910 PRINT
920 PRINT "TOTAL # OF QUESTIONS"; CO+WO
                                                                  22 N= 3
                                                                  23 GOSUB 41
930 PRINT
                                                                  24 MS=AUS .
940 PRINT "NUMBER CORRECT"; TAB(20); CO
                                                                  25 GOSUB 47
950 PRINT "NUMBER *WRONG*"; TAB(20); WO
                                                                  26 GOSUB 36
960 PRINT
970 PRINT VONS; "YOUR SCORE IS ****
                                                                  27 GOSUB 52
   (CO/(CO+WO))*100; VOF$; VON$; "$"; VOF$
                                                                  28 INPUT "PRESS <RETURN> TO CONTINUE ";R$:GOTO 54
                                                                                           CLEAR SCREEN
                                                                  29 REM
980 PRINT: PRINT
990 PRINT VON$; "PRESS <RETURN> TO CONTINUE"; VOF$;: INPUT Z
                                                                                                                           [more]
```

Volume VI, Number 6, Page 5

OSCAR'S LISTING Concluded

```
30 PRINT CLRS
31 RETURN
32 REM
                         TURN ON GRAPHICS
33 PRINT GRON$
34 RETURN
35 REM
36 REM
          PRINT TOP & BOTTOM LINES OF BORDER
37 PRINT VON$; SPC(70); VOF$
3B REM
39 RETURN
40 REM
41 REM
                         PRINT BLANK LINES WITH OUTSIDE BORDER
42 FOR I = 1 TO N
      PRINT VON$;" "; VOF$; SPC(66); VON$; " "; VOF$
44 NEXT I
45 RETURN
46 REM
47 REM
                         PRINT MESSAGE LINE
48
    T=LEN(M$):S=(70-T)/2:REM ..... CENTERS TEXT ON SCREEN
     PRINT VON$; SPC(2); VOF$; TAB(S-2); VON$; M$; VOF$; TAB(73);
   VON$; SPC(2); VOF$
50 RETURN
51 REM
52 REM
                         TURN OFF GRAPHICS
53 PRINT GROF$
54 REM
55 PRINT: INPUT "PRESS <RETURN> TO CONTINUE ";Z
56 PRINT CLRS
110 PRINT VONS;
   " YOU CAN SELECT A MULTIPLICATION TABLE TO DRILL";
120 PRINT VONS; "SELECT THE TABLE YOU WANT TO DRILL (2-10)";
   VOF$;:INPUT T
130 PRINT: PRINT VONS:
   " YOU MAY GO THROUGH THE TABLE YOU CHOSE AND PRACTICE ";
   VOF$
140 PRINT: PRINT VONS;
   " BEFORE YOU TRY TO GIVE THE ANSWERS YOUR SELF "; VOF$
145 PRINT: INPUT "PRESS <RETURN> ";Z
150 PRINT CLRS
160 FOR I=1 TO 10
170 PRINT TAB(30); VON$;: PRINT USING " ## ":I;:
                "; VON$; " x "; VOF$; "
                                       "; YON$;:
   PRINT VOF$;"
   PRINT USING " ## ";T;:PRINT VOF$;"
                                         "; VON$; " = "; VOF$;
      "; VON$; I*T; VOF$
175 PRINT
180 NEXT I
200 PRINT: INPUT "PRESS <RETURN> TO CONTINUE ";Z
400 PRINT CLRS
500 FOR I = 2 TO 10
510 PRINT VONS::
   PRINT USING "## x ## =";I;T;:PRINT VOF$;:INPUT Z
530 IF Z=I*T THEN 540 ELSE 560
540 REM
```

550 PRINT:GOTO 580

```
560 PRINT TAB(20):
  VON$; " OOOPS! WRONG ANSWER...PRESS <RETURN> "; VOF$;:
  INPUT Z2
570 PRINT: GOTO 510
5BO NEXT I
600 PRINT: PRINT VONS; " WANT TO TRY ANOTHER TABLE <Y><N>";
  VOFS::INPUT RS
610 IF R$="Y" OR R$="y" THEN 620 ELSE 630
620 PRINT CLRS: GOTO 110
630 PRINT CLRS:PRINT:PRINT VON$;
    THANKS FOR PRACTICING YOUR TABLES -- BYE BYE FOR NOW "
  ; VOF$
635 REM
                        CLEAN UP & EXIT ROUTINE
640 FOR I=1 TO 500:NEXT:
650 PRINT CLR$:SYSTEM
```

Well, there you have the entire schmateratti! Now if you, a friend, neighbor, or even a school teacher you know has one or more kids who need to practice their "numbers", tell 'em that you have this jim-dandy Computer Aided Instruction programme which runs under MBASIC on almost any B-bit CP/M machine. Who know, you may even become known as a Real Swell Guy and Genuinely Peachy-Keen Fellow!

Just be sure that you write Oscar Yohai (care of the SEBHC JOURNAL) and tell him how his programme works for you or your chum(s). We're sure that somebody out there will eventually find value in their otherwise dusty and languishingly-unused Ole Grey Box....

[eof]

[Editor's note: We thank our friend, Oscar Yohai for submitting this software to the public domain, and believe all our readers will be able to get some good ideas from his tireless labour. There still are lots of underused H/Z B-bit machines which, in our admittedly lop-sided opinion, are crying out to dusted off and put back into use. For example, another SEBHC member--Prof Stephen Kaiser--is using refurbished H/Z-89s and '90s in two Cambridge, MA classrooms as teaching machines (see his letter in November's JOURNAL). There is no reason we can see--other than pure sloth--for anyone owning an all-in-one computer to not get it working and then find it a good home where it may be used by real people to perform real work for less-fortunate--but likewise real--people.

Because our H/Z 8-bit machines are no longer supported by Heath Company or Zenith Data Systems doesn't mean that they are no longer useful. If that were true, you wouldn't be reading this copy of the SEBHC JOURNAL which we produced with such a no-longer-supported H89! Once built and running, your Heathkit computer performs all the jobs its' designers had in mind for it, until it either comes to an un-natural end or is tossed onto a dust heap. They are professionally-designed TOOLS, NOT toys for the superciliously-wealthy to play with, then abandon for something touted as "newer" or "better"....]

Volume VI, Number 6, Page 6

"TRY THIS ON YOUR PIANO"

WE DON'T DO WINDOWS! by Leonard E Geisler Editor-Publisher, The SEBHC JOURNAL

Our eight-bit Heathkit/Zenith Data Systems machines don't do "windows".

"What are 'windows?!'"

For us 8-bit users, Real Windows are those glazed holes in the sides of our homes, offices, or other buildings which let daylight in to shine on you, or lets you look out. Often they may be opened to allow a free exchange of inside and outside air. And that's about all there is to real windows, unless you (or a maidservant) are the one who "does" (cleans) windows.

Until recently, that is. Pick up any computer magazine from your local news stand display and you will see three or more articles about the latest peesee-only software touting "windows-compatibility", or babbling on at great length about what to do with "windows". Some articles even have postage-stamp sized computer-screen reproductions of typical "windows" which attempt to illustrate what they are good for. What most of those articles don't tell you is that most "windows" software occupies lots of RAH, and that it takes a lot of time to learn how to use them--time you could more profitably use on learning more about your computer.

So what are computer "windows"? The simplest explanation we have evolved is: Graphic patterns which overlay whatever is presently on the computer screen. These patterns ("windows") usually box a list of various software functions which you may call up and run either from the keyboard or with a joystick.

Most 8-bit machines are not equipped with joysticks and if you have that exceedingly-rare bit of software which does run in a windows-like manner, you usually can access the functions listed, either by pressing one or more of the "f" keys or by chosing appropriate keypad keys.

We have a piece of eight-bit editing software which works like that: "TEXt PROcessor". This easy-to-use program puts a list of functions on line 25 of our H/Z-19 or '89/'90 screen. Selecting any of these keys results in more functions being listed for the particular key pressed. Pressing the red function key presents you with a series of single screens-full of explanations of what each function key can do for you. TEXt-PRO's help screens overlay whatever is on the screen, but when you've found the operation you needed and exit HELP, the original screen comes back. That's about as close as you can get to windows with our machines and software. And, frankly, it's about as close as I'll ever want to get to windows....

ON BUYING A HOME COMPUTER

Lots of folks have asked me for advice about buying a new home computer for working on some project or other. I guess they think I know lots about such gadgets because they know I have--and use--several. Invariably, when I say, "get a used H-89 or Z-90", they ask me what kind of machine those are, or "are they eye-bee-em compatible?", et cetera, ad nauseum.

Most of the time I don't bother to answer that kind of question directly, but rather explain to them my reasons for suggesting first off that they go for an older machine (namely that its' price certainly won't clean out one's bank account), secondly that it usually comes with a pretty good set of used software (or the seller can help them buy it Really Cheap), and often has a nice, working dot-matrix printer.

If the person is reasonable and willing to listen further, I'll go on to say that I can let them try out my own H-89 to see if it does what they think they want a computer to do. In many cases I'm able to pry out their un-expressed reasons for thinking that they Really Need A Computer, such as "I'm going to write a book", or "I'd like to keep my household accounts (or recipies) in better order". These folks show some promise, because they almost always respond positively to a trial run on my machine. And I'll show them QUERY! for data-keeping, TEXT PRO to write letters (or that "deathless prose") and a couple other simple programmes which usually take very little time and effort to learn to use. Then I explain that a setup similar to mine shouldn't cost more than a couple hundred bucks--say \$400, at most--and then open a copy of "PC Computing" or "BYTE" magazine to all those pretty pictures of "compatible" machine, taking particular care to point out the prices of those "gems" and how much the software costs to do just the simple things they want to do.

Many times I've been able to steer these nice people away from their obsession with eye-bee-em computers and down to earth, especially now that most of us real people have little spare cash to toss around (the ghost of old Herbert Hoover is a-hovering in the wings, don't you know).

In those few instances that I've been unable to change their minds, I let them play with my H120 and try out Microsoft's WORD or another word processor "just to see what can be done with a more nearly eye-bee-em compatible used machine" rather than going out and spending lots of money for flashy bells, whistles, and colour glitz. Sometimes it works but mostly not because once those computer novices have looked at the fancy (expensive) machines at Sears or some other "business machines" store, they're hooked. Not especially on the software, but that the full-colour machines run those "wonderful games which our kids love so much". I'm telling you this fact: Let your kids lay hands on the new computer and you'll never get to use it. They are even more locked into the "eye-bee-em" mind-set than their parents are!

If you really want a computer which you can use any time you want or need to without prying a screaming juvenile from the keyboard, a good old H/Z-89 or Z-90 is the fer-sure cure!

Volume VI, Number 6, Page 7

NEWS FROM LINDLEY SYSTEMS!

LS Software (Lindley Systems) Moves to Arizona

A Message from Bill Lindley

Well, here we are in the Great American Desert. The saguaro cactus are just about the tallest plants out here. I thought about stringing Christmas tree lights up on one, but something covered with two inch needles (sharp!) just doesn't cry out, "Light me."

This was our second move in 12 years of business. Hard to believe we sold our first software back in 1980! Here's to many more years of 8-bit support. -- Bill

PC89LINK File Transfer

Are you are using your 8-bit computer alongside a PC or Z-100? One of our customers uses several H-89's in a classroom environment. The students type their papers into the 8-bit computers and then send them up to the teacher's PC. The file transfer program they use is PC89LINK.

PC89LINK transfers files between an H-8 or H/Z-89/90 (running HDOS or CP/M) and a Z-100 or PC compatible computer (under MSDOS) at baud rates up to 38400. (Or between two '89s, a Z-100 and a PC, two PC's, etc.)

- A great way to back up your HDOS or CP/M files using MSDOS's high density floppy disks.
- Wildcards are supported, so sending "*.*" sends the entire disk or subdirectory
- Automatically determines whether files are binary or text and does appropriate translations. (e.g., HDOS has no Carriage Returns in its files; MSDOS does.) Or force Binary or Text mode for special applications.
- Supports all serial ports (COM1-4 on PC)
- Disk manipulation: HDOS: disk mount, dismount, and reset; CP/M: disk change; MSDOS: change directory and current drive.
- · Requires only a simple 3-wire serial cable.

Order #150, \$25.00 postpaid (two disk set). Specify Hard or Soft Sector Dual Format HDOS&CP/M disk; and 5.25" or 3.5" disk for MSDOS. Or specify one 5.25" and one 3.25" MSDOS disk (for laptop to desktop use)

Ultimate Driver For Ultimate Printer Control

What does the Ultimate Printer Driver offer which no other HDOS or CP/M driver can do? Let you take advantage of all your printer's special features. While PC software is designed to know about things like italic, near letter quality, font selection, and so on, most 8-bit programs never heard of them.

That's why the Ultimate Driver will improve your printouts. It has Visible Control Characters. Even if your word processor doesn't know about near letter quality, put the text "-[x1" into your document and your printer will go to NLQ (assuming you have an Epson or compatible NLQ capable printer, Escape-x1 turns on NLQ.) You can use any printer command the same way. Just look in your printer's manual.

Ultimate Printer Drivers also include:

- Up to four automatic initialization sequences (HDOS: Send files to LP4: for condensed, etc.)
- · Line merge for preparing long lines
- Left Margin, Page length, Auto Perf. skip selectable
- Support for all popular serial and parallel interfaces
- Printers: Epson and compatibles, Star, NEC-8023,
 C. Itoh 8510, Okidata Microline, MPI, Paper Tiger.
- Auto-installs into Heath CP/M 2.2.02, .03, .04.
- · Source code!

Please specify operating system (HDOS or CP/M), printer type, and whether you would like Hard or Soft sector disks. \$20.00 postpaid.

A Special Offer For SEBHC Subscribers

Mention the SEBHC Journal when you order PC89LINK from LS Software... and receive a copy of the Ultimate Driver at no extra charge.

This offer expires April 30, 1992.

LS Software

8139 E. Mawson Rd., Mcsa AZ 85207 Tel: (602) 380-9175 Call or Write for Free Catalog.

Volume VI, Number 6, Page 8

GUEST EDITORIAL

Computer-User-Owner Related News, Views, and Hints by Associate Editor At Large, A Stapher

Sun City, AZ, 15-Jan-1992--Special to the SEBHC JOURNAL-Latest tax grab comes to on-line computer service usage (or, Things Are Really Tough All Over)! New York state now "requires" that all CompuServe members living in the state pay a four-percent state sales tax on all connect and on-line charges. (Yetch!) If you live in New York state, you might consider finding a different way to communicate with other hackers, say over some friendly radio amateur's Packet Network. And do pester your local and state political critters! Firmly tell them: "Taxation Is Theft!" (Well, isn't it?!)

Looking for a way to save money and make friends? perforated tractor strips from your printouts, bundle and give them to a friend, or a pet shop where gerbils and other pet rodents are in abundance. The squeakers love this kind of bedding, and the pet shop won't kick you out when you ask for a pet-food or toy discount. Save unsactisfactory or extra printout sheets, neatly stack and cut into quarter sections. Staple twenty or more quarter sheets into scratch pads, used side down. Handy for shopping lists, telephone jot-em pads, etc. Save your used printer-ribbon cartridges for re-inking at about a buck a piece, compared to the original cost. The nylon fabric is pretty tough; lasts through dozens of re-inkings before giving out. Do check out the newstands for a copy of "COMPUTER MONTHLY"; they have several inexpensive sources of ribbon ink listed in the back pages and want-ads section.

WARNING! DO NOT USE WD-40 or similar spray lubricants on printers or printer ribbons! It Really Gums Up Everything With Congealed Lanolin! Properly clean your printer with a squeaky-clean 1/2-inch natural bristle paint brush, soft cloths and gentle strokes. Lubricate print-head rails with sparingly-applied oderless parafin oil--which you can buy at any reputible hardware store in the lamp section. Use a non-ammonia window-cleaner-moistened paper towel (NO ALCOHOL!) to wipe down the printer's external surfaces; follow with a dry face tissue to mop up any left-over moisture. The invisible film of cleaner remaining helps reduce static buildup and finger-prints plus other unsightly crud....

Periodically go thru all the discs you've accumulated since you started computing. Set aside those which are only partially full of data; go through them later and check their contents. You'll be surprised how many copies you've saved of a particularly-useful program. DO NOT discard these discs (especially if they're hard-sector!). Do concentrate and saving their best files onto high-density 40 or 80 track hard or soft-sector discs. Use a bulk tape eraser and wipe the discs, for re-use. Soften and remove labels with sparingly-applied lighter fluid. Examine each disc's surface through

the slots with glancing reflected light to see how badly worn it is. Check out a badly-scratched disc by running "INIT" & "<MEDIA CHECK?>", or "FORMAT" & "FINDBAD". More than ten errors on a disc? Discard that disc or regret it later!

Note that there are a Whole Bunch of SEBHCers out here in 8-bit land who're still using hard-sector drives, and are hoping to find sources of hard-sector discs. Run a notice in the next edition of the SEBHC JOURNAL to get those people's attention...won't cost you more than a post card to do it...and you could earn someone's lasting friendship!

Read about a very smart married couple in last September's "YANKEE" magazine--the entire issue was given over to the Joy Of Living Frugally. This couple publishes "The Tightwad Gazette" from their recycled farmhouse up there in New England. These "frugal zealots" thriftily worked themselves up to a Very Nice Income level by practicing an old-time art embodied in a motto which says: "Waste not, want not". We suggest that you check this magazine--and that article--out at your local public library. It's very good reading, and we're sure that you'll garner a whole bunch of very good ideas from it!

Essentially, what we SEBHCers are doing with our 'vintage' Heath H8 and H/Z89/90 computers is applying old time thrift. For example, our editor has spent well over \$6000 in aquiring numerous Heathkit computers, sofware, and printers by which he publishes this newsletter, keeps books, compiles mailing lists, edits and rewrites letters of complaint for friends and neighbors, and Generally Just Has Fun.

He says, "I invested lots of time, hard work, and money to get these machines up and running according to factory specs. I'm not about to go out and buy (oh, that dirty word!) a new machine just because some corporate brass hat says so!"

"Now that finally all my are computers working right is no excuse to toss them out and buy some stinkingly-expensive yuppy-gadget!" says Len Geisler, editor and publisher of the SEBHC JOURNAL, a privately-circulated 'vintage computer' user's newsletter.

"Every day I get enquiries from people who think they want (or need) a computer. In each instance I try to discourage them from wasting money on some high-priced whizz-bang gadget which some well-intentioned friend has recommended they buy. What I do is explain the economics of starting with something old but good, learning what that older computer can do, and then go look at what's available in later (maybe peesee compatible) machines. After that, it's up to them to compare the cost of what they have with what's available, does the same job, and allows wider choice of 'bells & whistles' software. An old-timer once said to me, 'Why send a man in a big limosine to the corner store for a newspaper when a boy on a bicycle does it faster and cheaper?!'"

Volume VI, Number 6, Page 9

FOR SALE / MISC NOTES

MISC NOTE #1

On page 8 of this edition our Associate Editor At Large, A Stapher, briefly described what we think is a most worthy companion in the thrift newsletter field, namely The Tightwad Gazette. We think many of our JOURNAL readers can get a lot of good ideas from The Gazette, so here's their address and subscription information:

The Tightwad Gazette RR1 Box 3570 Leeds, ME 04263

Send your name and address with US\$12 for a full year subscription, one copy every month. (Please mention you saw The Gazette mentioned in the SEBHC JOURNAL.) Also note that they are looking for thrifty, money-saving ideas, and will reward any accepted article's author with a free 1-year subscription as payment, just like the SEBHC JOURNAL does!

T TO BUY... RENT TO BUY... RENT TO BUY... RENT TO BUY...

Offer Number One--

A basic office computer setup, consisting of the following equipment:

290 computer with 2/4 Mc/Sec D-G Super89 CPU and full 256k RAM, two internal 1/2-ht floppies, EPSON MX-80 printer w/Dots Perfect upgrade, choice of Magic Wand word processor or TeXT PROcessor, choice of ZENCalc or SUPERCALC spreadsheet, QUERY!3 database w/report-writer and calculator functions, registered CP/M-80 operating system, and is complete with all manuals, cables, free setup, one box of 10 blank soft-sector discs, and ten hours of onsite help/training (within 50 miles radius of Ann Arbor, MI.) Thrifty monthly rental (minimum contract 6 months), only:

Twenty-five Dollars! (plus \$200 refundable initial deposit)

Offer Number Two--

Standard H90 (64k ram) computer with two internal floppy drives, choice of Magic Wand or TeXT PROcessor, ZENcalc or SUPERCALC spreadsheet, QUERY!3 database (as above) & CP/M-80 operating system, manuals, cables, EPSON RX-80 printer, discs, free setup and same onsite help/training as in above Offer No. One. Thrifty monthly rental (minimum contract 6 months), only:

Twenty Dollars!
(plus \$100 refundable initial deposit)

Note: To rent or make an outright purchase of either/both computers, contact L Geisler, 895 Starwick Drive, Ann Arbor, MI 48105; phone 313-662-0750, 10am - 5pm EST weekdays only.

YOUR H/Z-8-BIT MACHINE CAN NOW BE YOUR WHOLE-HOUSE GUARDIAN!

(See your Heathkit Catalogue for X-10 modules and prices.)

RICK SWENTON'S X10.COM, CP-290 Interface Software for CP/M is available from the SEBHC JOURNAL for use on any H/Z 8-bit system. This package contains the instruction manual and one H-37 floppy disc (hard-sector by special order only) at \$7 postpaid. Here is a list of the X10 COM files on the distribution disc and what systems they'll work with:

Note: X10 under ZCPR3 will use the current system TCAP. Under CP/M, X10 will use its own internal 'fake' ZCPR3 ENV and TCAP. Terminals below are internal to X10 and are only in effect under plain CP/M.

These files are found in the library X10Cnnnn.LBR where nnnn is the version/release number. (X10C3012.LBR is Version 3.0 release 12)

X10.WS	- The User's Guide (Manual)
X10-H320.COM X10-H330.COM X10-H340.COM	- Heath H8/H89 port 320 (Heath H19 Terminal) - Heath H8/H89 port 330 (Heath H19 Terminal) - Heath H8/H89 port 340 (Heath H19 Terminal)
X10-KP2.COM X10-KP4.COM	- Kaypro-II - Kaypro-4
X10-SB1.COM	- Micromint SB-180 (This computer uses Z-System)
X10-LB1.COM	- Ampro Z80 Little Board w/Heath-19 Terminal

ZCPR3 Extended TCAP Files (Supports VLIB Graphics)

H19.Z3T - Heath H19 KP-2.Z3T - Kaypro-II KP-4.Z3T - Kaypro-4

Source code for X10 and the Overlays/TCAPs can be found in the library X10Snnnn.LBR.

The X-10 system is a comprehensive system of plug-in and wireless components which let you control lights and appliances from anywhere in your house or apartment from a central command center. This programmable command center sends digital signals over the existing residential power lines and are received by control modules installed at points where control is to be exercised. Any lamp or appliance plugged in to one of these special modules or outlets can then be operated from a hand-held, desktop, computer, or telephone command center. If you need more X-10 information, please call Heath Company at 1-800-253-0570 and ask for a BC-290-H data sheet.

Volume VI, Number 6, Page 10

EIGHT-BIT & "OTHER" VENDOR LIST

==> EIGHT-BIT SOURCES, SERVICES, and VENDOR DIRECTORY <==

Listing last updated on 28 January 1992

- CDR SYSTEMS, Inc., 7171 Ronson Road, San Diego, CA 92111; ph: 619-560-1272, 9a-5p Pacific Time Zone--ask for Herman.
- Chalfant, Rick, 100 Bayberry Drive, Springboro, OH 45066; ph 513-748-1344 Stocks H/Z89s, parts, software. Check him out; you might be pleasantly surprised!
- D-G ELECTRONIC DEVELOPMENTS Co., 700 S Armstrong, Denison TX 75020; ** phone 903-465-7805 (Central Time Zone) ** 8-bit "Heartbeat" computer, 8-bit "Super89" CPU upgrade/replacement board. 8ruce Denton, president; Service & advice available, also GOOD H8 and H/Z89 hardware at clearance prices; contact 8ruce for details. A *Certified* YOU-BETCHA GOOD GUY!
- DISK MOVERS, 8534 McCormick 8lvd, Skokie, IL 60076; phone 708-679-3727 (Central Time Zone)--ask for Miriam. HARD-SECTOR and soft-sector discs for H/Z8s, '89s in bulk quantities at very low prices! "VERY NICE and HELP-FUL PEOPLE." (Do give them a call and mention us!)
- GOLDSMITH SURPLUS, 2107 N Adams/PO Box 18676, Indianapolis, IN 46218; 317-545-4747, ask for Phil or Eric. Dealers in "Almost Any Surplus Material You Have (or Need)"! (Please mention that you found them listed here!)
- HOYLE & HOYLE SOFTWARE, 111 Sparrow Drive, Isle of Palms, SC 29451. (Answer mailed enquiries only.) Their QUERY-III database runs on H8s thru Z120s. "REALLY GOOD GUYS"!
- LINDLEY SYSTEMS, 8139 E Mawson, Mesa, AZ 85207 -- phone: 602-380-9175. All kinds of neat-OH 8-bit software such as PC89LINK--lets you transfer 8-bit stuff to H/Z100s and peesees over a null-modem cable. Ask either Bob or Bill for a catalogue, they're Really Fine Fellows!
- MAGNOLIA MICROSYSTEMS, 2818 Thorndyke Avenue West, Seattle, WA 98199; phone 206-285-7266 (Pacific Time Zone). Ask for "Mark". Special memory upgrades and op-systems for H/Z89s & 90s. Trustworthy but slow people.
- MICRO COMPUTER REPAIR SERVICE, 2308 Industrial Highway, Ste C Ann Arbor, MI 48104; phone 313-663-3646. D-DRIVE REPAIRS & SALES. Ask for Mike Morris, he's "A SUPER GUY"! (Tell him Lenny sent you.)
- MICRONICS TECHNOLOGY, Suite 159, 54 Dalrada Road, Montgomery, AL 36109; phone 205-244-1597 voice, 205-244-0192 bbs CTZ

- Darrell C Pelan, pres. Soft & Hardware, '89 hardiscs Catalogue & 8-bit help available. A REALLY GOOD GUY!
- New Orleans Data General Services, 7230 Chadbourne Drive, New Orleans, LA 70126; phone 504-241-9388--"Dave". Colour and sound boards for H8, H89. Out of business, but willing to provide tech advice on their products. Dave's ANOTHER GOOD GUY!
- QUIKDATA COMPUTER SERVICES, Inc., 2618 Penn Circle, Sheboygan WI 53081; phone 414-452-4172--Henry Fale (Fah-lay) Prop. Mfgr, sales, service, 8-bit machine support & parts; publishes H-SCOOP Heath/Zenith user's newsletter, 24-hour H/Z user 88S. Ever busy but "A REAL GOOD GUY!"
- SIGMASOFT & SYSTEMS, 2433 Winterstone Drive, Dallas TX 75023-7818; 214-596-0116 (Central Time Zone)--Clay Montgomery--hardware/peripherals mfgr, software publisher, nardware & tech support, RAM drives, Hi-Res grafix addons for H/ZB9s. Catalog & help: A *FANTASTIC* GOOD GUY!
- SKYCASTLE COMPUTER PRODUCTS, Box 1412, San Carlos, CA 94070; 415-254-3931 after 6pm Pacific Coast time--ask for Mike. Calligraphy-II and other FANTASTIC dot-matrix graphic printer software products. A REALLY, SUPER-GOOD GUY!
- TMSI/LEE HART, 323 West 19th Street, Holland, MI 49423
 616-396-5085 (evenings, weekends--usually) Their motto:
 "Inovative Products for the H/Z89"
 Misc. 8-bit hardware items, hardware/software support
 for '89/90 users. "A NICE GUY & TOP-NOTCH ENGINEER!"

THER VENDOR NEWS... OTHER VENDOR NEWS... OTHER VENDOR NEW

So maybe you have an H/Z100?! We won't call you renegade for having the next step up from the H/Z90, but since we've been getting so many calls for help from subscribers who've aquired one of these machines, we thought you'd like to know that help (and hardware) is out there!

Get in touch with GERNWARE ENTERPRISES, PO 80x 1495, Rome NY 13440, and ask them for their latest product catalogue. In it you'll find listed a Whole Bunch of Neat Z100 Hardware and Public Domain software at most reasonable prices. For example, their INFO-HZ100 PD LI8RARY SET of 15 discs 15 sells for only \$30! Please note that they accept only cash or cheques--no plastic. And do tell 'em you saw them mentioned here in the SE8HC JOURNAL....

Volume VI, Number 6, Page 11

The JOURNAL's Own Catalogue

Inc occurred s	own oadalogue
FIBRE-BOUND SEBHC JOURNAL BACK-ISSUE VOLUMES	is received in or before August, 1999 you'll get another full
	year. Label top line would then read *(999> ends Aug-2000".
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V-III (Volume III, Nos 1 thru 12) Aug-BB Jul-B9 \$22.50	Order No. Description P&H included Price
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The SEBHC JOURNAL's Back Page

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- * Subscribers are automatically Society of Eight-Bit Heath Computerists members. Member's subscription number and expiration are clearly printed on mailing labels. The three member classes are: REGULAR (voting H/Z 8-bit user) ADVERTISING (one vote/vendor) and ASSOCIATE (non-8-bit computerist, library, etc.). REGULAR members can hold any elective Society office. ASSOCIATE members cannot hold office or vote. The Society's official yearly meeting place and time is announced every July in the JOURNAL. Advance registration of US\$25 for each attendee no later than 30 July, please.
- * All advertising is printed Free Of Charge. Vendors: Please do submit your B&W "camera-ready" ad copy, 7"w x 9"h (1 page to an issue) no later than the 10th of month in which it's scheduled to appear. All Society members can run one new free 250-word (maximum) Unclassified Want Ad every month.
- * All subsribers/members are urged to submit their H/Z-oriented computer articles on disc in standard ASCII format rather than as hard copy. If a word needs to be emphasised or italicised please insert these symbols PRECEEDING the word: [EMPH] for emphasise, [ITAL] for italics. We'll return your disc after copying it and will gladly copy any SEBHC JOURNAL software disc onto it. Note: We can't pay authors but we do extend their subscription another year for a published article.
- * The SEBHC JOURNAL is composed, edited and published by L E Geisler at 895 Starwick Drive, Ann Arbor, MI 48105. Phone 313-662-0750, 9am 6pm Eastern Time Zone, Mon thru Fri only. Other times (EMERGENCIES ONLY): 313-769-6052 (residence).

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